

Amendment to the Claims:

The following listing of claims replaces all previous versions and listings of claims:

1. (Currently amended) A computer-implemented method for providing a dynamic multi-dimensional commodity modeling process, comprising:

creating a commodity hierarchy data structure comprising:

at least one top level node; and

at least one leaf node dependent upon said at least one top level node;

assigning attributes to nodes in said hierarchy, said attributes sharing uniform characteristics; and

——selectively assigning at least one dimensional attribute to a node; wherein dimensional attributes includes at least one of:

a performance tolerance;

a noise filter;

an oscillation thresholds or trends;

consecutive trending; and

negative performance threshold; and operable for

invoking an analysis based upon said at least one dimensional attribute;

wherein dependent nodes inherit dimensional attributes assigned to corresponding upper level nodes.

2. (Currently amended) The computer-implemented method of claim 1, further comprising:

at least one secondary level node dependent on said at least one top level node;

and

at least one leaf node dependent on said at least one secondary level node.

3. (Currently amended) The computer-implemented method of claim 1, wherein

said attributes are dynamically alterable during instantiation of said multi-dimensional commodity modeling process.

4. (Currently amended) The computer-implemented method of claim 1, wherein said dimensional attributes are dynamically alterable during instantiation of said multi-dimensional commodity modeling process.

5. (Currently amended) The computer-implemented method of claim 1, wherein said invoking an analysis based upon said at least one dimensional attribute includes determining performance patterns related to a constituent.

6. (Currently amended) The computer-implemented method of claim 2, wherein said at least one secondary level node comprises at least one nested sub-commodity.

7. (Currently amended) The computer-implemented method of claim 1, wherein said at least one dimensional attribute is selectively assignable to at least one of:

a top level node; and

a leaf level node.

8. (Currently amended) The computer-implemented method of claim 2, wherein said at least one dimensional attribute is selectively assignable to at least one secondary level node.

9. (Currently amended) A system for implementing a dynamic multi-dimensional commodity model modeling process, comprising:

a quality management system; and

quality management components executing via the quality management system,

the quality management components performing:

creating a commodity hierarchy data structure comprising:

at least one top level node; and

at least one leaf level node dependent upon said at least one top level node;

assigning uniform attributes to associated with nodes in said hierarchy commodity

~~hierarchical structure, said attributes sharing uniform characteristics; and~~

~~selectively assigning at least one dimensional attribute selectively assigned to at least one node; in said commodity hierarchical structure~~

~~wherein dimensional attributes includes at least one of:~~

~~_____ a performance tolerance;~~

~~_____ a noise filter;~~

~~_____ an oscillation thresholds or trends;~~

~~_____ consecutive trending; and~~

~~_____ negative performance threshold; and~~

~~, said at least one dimensional attribute operable for invoking an analysis based upon said at least one dimensional attribute;~~

wherein said at least one dimensional attribute is inherited down to corresponding nodes in said commodity hierarchical structure.

10. (Currently amended) The ~~systemdynamic multi-dimensional commodity model~~ of claim 9, further comprising:

at least one secondary level node dependent on said at least one top level node;

and

at least one leaf node dependent on said at least one secondary level node.

11. (Currently amended) The ~~systemdynamic multi-dimensional commodity model~~ of claim 9, wherein said uniform attributes are dynamically alterable during instantiation of said multi-dimensional commodity model.

12. (Currently amended) The ~~systemdynamic multi-dimensional commodity model~~ of claim 9, wherein said at least one dimensional attribute is dynamically alterable during instantiation of said multi-dimensional commodity model.

13. (Currently amended) The ~~systemdynamic multi-dimensional commodity model~~ of claim 9, wherein said analysis includes determining performance patterns related to a constituent.

14. (Currently amended) The ~~systemdynamic-multi-dimensional-commodity-model~~ of claim 10, wherein said at least one secondary level node comprises at least one nested sub-commodity.

15. (Currently amended) The ~~systemdynamic-multi-dimensional-commodity-model~~ of claim 9, wherein said at least one dimensional attribute is selectively assignable to at least one of:

a top level node; and

a leaf level node.

16. (Currently amended) The ~~systemdynamic-multi-dimensional-commodity-model~~ of claim 10, wherein said at least one dimensional attribute is selectively assignable to said at least one secondary level node.

17. (Currently amended) The ~~systemdynamic-multi-dimensional-commodity-model~~ of claim 9, wherein said uniform attributes comprise at least one of:

sampling criteria;

period definition;

history definition; and

type of measure.

18. (Currently amended) The ~~systemdynamic-multi-dimensional-commodity-model~~ of claim 17, wherein said sampling criteria includes at least one of:

a product type;

an operations;

a step; and

a source.

19. (Currently amended) The ~~systemdynamic-multi-dimensional-commodity-model~~ of claim 17, wherein said period definition includes a unit of time to apply a specified analytic.

20. (Currently amended) The ~~systemdynamic-multi-dimensional-commodity-model~~ of claim 17, wherein said history definition includes a number of periods to be applied to a specified

analytic.

21. (Currently amended) The ~~systemdynamic multi-dimensional commodity model~~ of claim 17, wherein said type of measure includes a type of analytic to be applied, said type of analytic including a Shewhart Control Chart.

22. (Cancelled)

23. (Currently amended) The ~~systemdynamic multi-dimensional commodity model~~ of claim ~~922~~, wherein said performance tolerance defines a standard deviation from a mean.

24. (Currently amended) The ~~systemdynamic multi-dimensional commodity model~~ of claim ~~922~~, wherein said noise filter defines a statistically significant sample size for a period.

25. (Currently amended) The ~~systemdynamic multi-dimensional commodity model~~ of claim ~~922~~, wherein said oscillation thresholds or trends define unwanted change oscillating around a mean within limits.

26. (Currently amended) The ~~systemdynamic multi-dimensional commodity model~~ of claim ~~922~~, wherein said negative performance threshold defines absolute value limits.

27. (Withdrawn) A quality management system for utilizing dynamic multi-dimensional commodity modeling, comprising:

a data collection component operable for collecting raw data;

a dynamic multi-dimensional commodity model component;

a commodity constituent model generated by said dynamic multi-dimensional commodity model component;

a closed loop/corrective action component operable for resolving nonconformance issues resulting from analysis;

an analytic engine in communication with said data collection component, said multi-dimensional commodity model component, and said closed loop/corrective action component;

wherein said analytic engine performs:

receiving said raw data from said data collection component;
receiving said commodity constituent model;
performing analytics on said raw data according to rules defined by
said commodity constituent model; and
if said performing analytics results in a nonconformance,
transmitting nonconformance data to said closed loop/corrective action component.

28. (Withdrawn) The quality management system of claim 27, wherein said dynamic multi-dimensional commodity model component performs:

creating a commodity hierarchy data structure comprising:
at least one top level node; and
at least one leaf node dependent upon said at least one top level node;
assigning attributes to nodes in said hierarchy, said attributes sharing uniform characteristics; and
selectively assigning at least one dimensional attribute to a node operable for invoking an analysis based upon said at least one dimensional attribute;
wherein dependent nodes inherit dimensional attributes assigned to corresponding upper level nodes.

29. (Currently amended) A storage medium encoded with machine-readable computer program code for providing a dynamic multi-dimensional commodity modeling process, the storage medium including instructions for causing a computer to implement a method, comprising:

creating a commodity hierarchy data structure comprising:
at least one top level node; and
at least one leaf node dependent upon said at least one top level node;
assigning attributes to nodes in said hierarchy, said attributes sharing uniform characteristics; and

——selectively assigning at least one dimensional attribute to a node; wherein dimensional attributes include at least one of:

- a performance tolerance;
- a noise filter;
- an oscillation thresholds or trends;
- consecutive trending; and
- negative performance threshold; and

~~operable for~~ invoking an analysis based upon said at least one dimensional attribute;

wherein dependent nodes inherit dimensional attributes assigned to corresponding upper level nodes.

30. (Original) The storage medium of claim 29, further comprising instructions for causing said computer to implement:

at least one secondary level node dependent on said at least one top level node;
and

at least one leaf node dependent on said at least one secondary level node.

31. (Original) The storage medium of claim 29, wherein said attributes are dynamically alterable during instantiation of said multi-dimensional commodity modeling process.

32. (Original) The storage medium of claim 29, wherein said dimensional attributes are dynamically alterable during instantiation of said multi-dimensional commodity modeling process.

33. (Original) The storage medium of claim 29, wherein said invoking an analysis based upon said at least one dimensional attribute includes determining performance patterns related to a constituent.

34. (Original) The storage medium of claim 30, wherein said at least one secondary

level node comprises at least one nested sub-commodity.

35. (Original) The storage medium of claim 29, wherein said at least one dimensional attribute is selectively assignable to at least one of:

a top level node; and

a leaf level node.

36. (Original) The storage medium of claim 30, wherein said at least one dimensional attribute is selectively assignable to at least one secondary level node.

37. (New) The computer-implemented method of claim 1, wherein said performance tolerance defines a standard deviation from a mean, said noise filter defines a statistically significant sample size for a period, said oscillation thresholds or trends define unwanted change oscillating around a mean within limits, and said negative performance threshold defines absolute value limits.